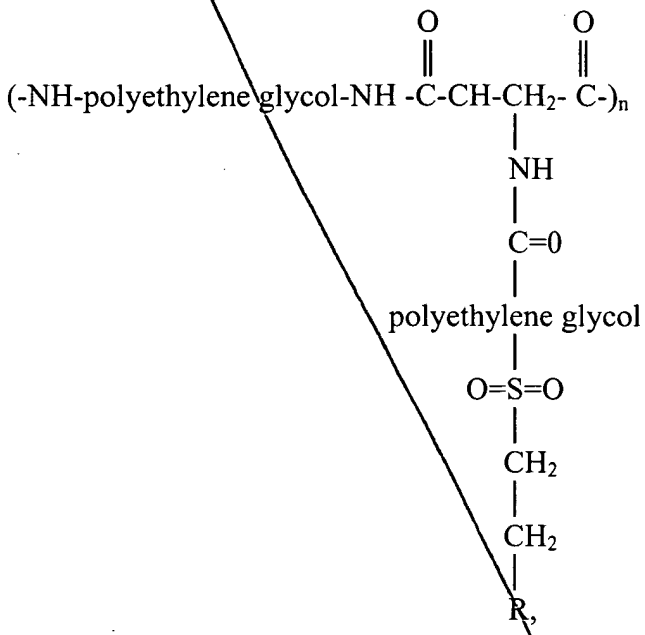
AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An immunological test kit ~~including a composition of matter~~ comprising one or more ~~an~~ immunologically reactive substances connected to an immunologically invisible carrier, said immunologically invisible carrier comprising polyethylene glycol copolymer units of the structure of:



wherein n represents the number of units connected in a chain, and R represents an attachment site for the one or more immunologically reactive substances.

2. (Original) The test kit of claim 1, wherein said immunological test kit is an ELISA kit.

3. (Original) The test kit of claim 1, wherein said immunological test kit is an immuno-capillary kit.

4. (Cancelled)

5. (Currently Amended) The test kit of claim 1 [[4]], wherein the one or more ~~said~~ immunologically reactive substances comprise ~~consists essentially of~~ an epitope.

6. (Currently Amended) The test kit of claim 1 [[4]], wherein the one or more ~~said~~ immunologically reactive substances comprises ~~an~~ antibody.

7. (Currently Amended) The test kit of claim 1 [[4]], wherein the one or more ~~said~~ immunologically reactive substances comprises ~~an~~ antigen.

8. (Cancelled)

9. (New) The test kit of claim 1, wherein the carrier consists of two to two hundred units.

10. (New) The test kit of claim 1, wherein the carrier consists of four to twenty units.

11. (New) The test kit of claim 5, wherein the one or more immunologically reactive substances comprise two distinct epitopes.

12. (New) The test kit of claim 5, wherein a unit carries more than one epitope.

13. (New) The test kit of claim 1, wherein the one or more immunologically reactive substances comprise an amino acid sequence selected from the group consisting of: VQEGVQQEGAQQP-(beta-A)(beta-,4)C; EIAAKAIGKKIHQNNG-(beta-A)(beta-A)C; ISTLIKQKLDGLKNE-(beta-A)(beta-A)C; PWAESPKKPE-(beta-A)(beta-A)C; DKKAINLDKAQQKLD-(beta-A)(beta-A)C; ITKGKSQKSLGD-(beta-A)(beta-A)C; and GMTFRAQEGAFLTG-(beta-A)(beta-A)C.

14. (New) The test kit of claim 1, further comprising a reporter moiety connected to the immunologically invisible carrier, wherein the reporter moiety is attached:

(a) directly to the carrier at position R, if other positions R of the copolymer units are occupied by one or more immunologically reactive substances;

(b) directly to the carrier at a position other than at position R; or

(c) indirectly to the carrier by being attached to the one or more immunologically reactive substances, the substances being directly attached to the carrier.

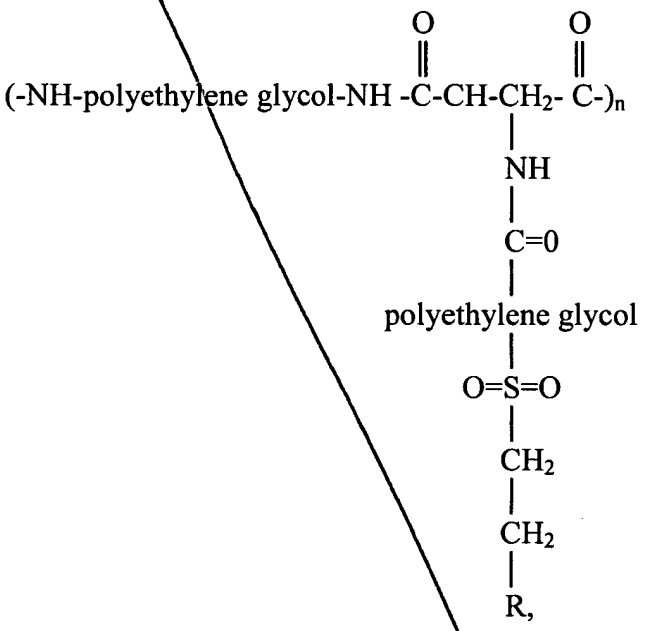
15. (New) The test kit of claim 14, wherein the reporter moiety attachment occurs:

(a) before an immunological assay; or

(b) during or after an immunological assay.

16. (New) The test kit of claim 14, wherein the reporter moiety is biotin.

17. (New) A composition of matter comprising one or more immunologically reactive substances connected to an immunologically invisible carrier, said immunologically invisible carrier comprising polyethylene glycol copolymer units of the structure of:



wherein n represents the number of units connected in a chain, and R represents an attachment site for the one or more immunologically reactive substances.

18. (New) The composition of matter of claim 17, wherein the one or more immunologically reactive substances comprise one or more epitopes.

19. (New) The composition of matter of claim 18, wherein the carrier consists of two to two hundred units.

20. (New) The composition of matter of claim 18, wherein the carrier consists of four to twenty units.

21. (New) The composition of matter of claim 18, wherein the one or more epitopes comprise the same epitope.

22. (New) The composition of matter of claim 18, wherein the one or more epitopes comprise two distinct epitopes.

23. (New) The composition of matter of claim 18, wherein the one or more epitopes comprise three distinct epitopes.

24. (New) The composition of matter of claim 18, wherein a unit carries more than one epitope.

25. (New) The composition of matter of claim 18, wherein the one or more epitopes comprise an amino acid sequence selected from the group consisting of:

VQEGVQQEGAQQP-(beta-A)(beta-,4)C; EIAAKAIGKKIHQNNG-(beta-A)(beta-A)C; ISTLIKQKLDGLKNE-(beta-A)(beta-A)C; PWAESPKKPE-(beta-A)(beta-A)C; DKKAINLDKAQQKLD-(beta-A)(beta-A)C; ITKGKSQKSLGD-(beta-A)(beta-A)C; and GMTFRAQEGAFLTG-(beta-A)(beta-A)C.

26. (New) The composition of matter of claim 18, further comprising a reporter moiety connected to the immunologically invisible carrier, wherein the reporter moiety is attached:

(a) directly to the carrier at position R, if other positions R of the copolymer units are occupied by one or more epitopes;

(b) directly to the carrier at a position other than at position R; or

(c) indirectly to the carrier by being attached to the one or more epitopes, the epitopes being directly attached to the carrier.

27. (New) The composition of matter of claim 26, wherein the reporter moiety is biotin.

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28. (New) The composition of matter of claim 18, wherein the one or more epitopes are attached to a linking molecule, the linking molecule being attached directly to the immunologically invisible carrier.

INTERVIEW SUMMARY

On August 13, 2003, attorney of record Michael J. Wise personally met with Examiners Mary Ceperley and Rodney Swartz regarding this case. They discussed the rejection of the present claims over the Zalipsky reference (Bioconjugate Chem. [1995], 6, 150-165). The proposed amended claims would narrow the claims to a specific PEG copolymer defined in Figure 2 of the specification. Further, they discussed that Zalipsky stressed the fact that his PEG carriers reduce immunogenicity and antigenicity, while the PEG copolymers of the present application do the opposite. The PEG copolymer carriers of the present invention reveal the immunogenicity of the attached epitopes and antigens because their immunological properties are key to their purpose for immunological assays. Examiner Ceperley indicated that the proposed narrowed claims likely would be allowable.